

5.4 33rd Street and Sheridan Boulevard

BEFORE

ADT: 16,700 veh/day (1999)

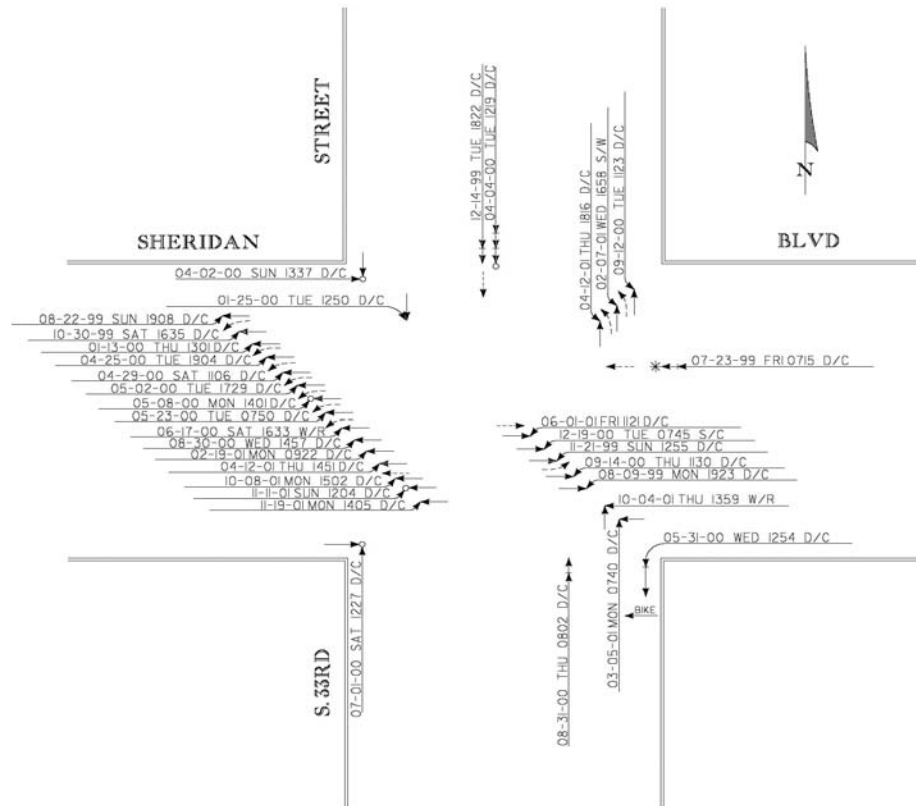
Time Period:

7/1/99-12/31/01

Traffic Control: Actuated Coordinated Signal

Crash Pattern:

All Left Turns



Total Crashes in Before Period: 33



33rd Street and Sheridan Boulevard - Southbound Approach (Before)

5.4 33rd Street and Sheridan Boulevard

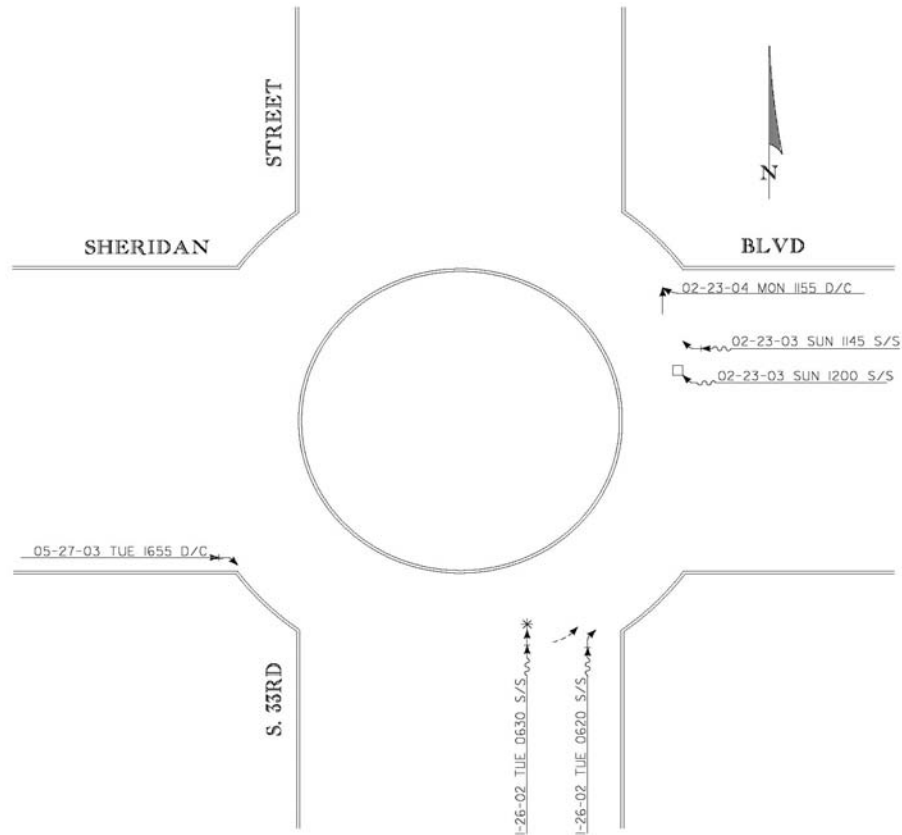
AFTER

Countermeasures: Removed Traffic Signals and Constructed Roundabout

Time Period: 7/1/02-12/31/04

Improvement Completion Date: July 1, 2002

Speed Limits: NS Arterial- 35 mph
EW Arterial- 35 mph



Total Crashes in After Period: 6



33rd Street and Sheridan Boulevard - Southwestbound Approach (After)

5.4 33rd Street and Sheridan Boulevard

COMPARISON

Countermeasures:

Removed Traffic Signals and Constructed Roundabout

Improvement Completion Date:

July 1, 2002

	Before	After	Change
Analysis Period	7/1/99-12/31/01	7/1/02-12/31/04	-
Primary Crash Benefit			
Total Number of Correctable Crashes	28	1	-96%
All Other Intersection Crashes	5	5	0%
Intersection Crash Experience			
Injury + Fatal Crashes	5	0	-100%
Property Damage-Only Crashes	27	5	-81%
Non-Reportable Crashes	1	1	0%
<i>Total Number of Intersection Crashes</i>	<i>33</i>	<i>6</i>	<i>-82%</i>
Total Intersection Benefit			
Crash Rate	2.21	0.42	-81%
EPDO Rate	4.92	0.36	-93%
EPDO Number*	73.4	5	-68.40

Cost of Property Damage Crash: \$ 6,500
Total Benefit (12 months): \$ 444,600
Equivalent Uniform Annual Benefit (EUAB): \$ 569,990

Total Cost of Improvements:

Equivalent Uniform Annual Cost (EUAC): \$ 52,760
Initial Cost: \$ 605,142

Benefit-Cost Ratio: $\frac{\$ 569,990}{\$ 52,760} = 10.8$

Net Benefit (Present Worth): \$ 569,990 - \$52,760 = \$517,230

**Change Statistically Significant at 95% Confidence Interval*

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